

JAN 19 2007

Application No.: 09/512,395

Docket No.: 42390.P0744C2

Utility Patent Application

REMARKS

Applicant appreciates the Examiner's attention to this Application.

The Office Action rejects each of claims 21-37 and 39-41 of the present application on the basis of one or more of the following: 35 U.S.C. §§ 101, 102, 112, and the judicially created doctrine of obviousness-type double patenting. This Preliminary Amendment cancels claims 21-37 and 39-41, and enters new claims 42-60.

The Office Action also objects to the specification. The Field of the Invention section was deleted previously. This response reinstates the Field of the Invention section with minor amendments thereto.

Applicant respectfully requests reconsideration of the present application in light of the amendments and remarks herein.

Specification

Applicant respectfully asserts that the current specification meets all legal requirements. For instance, 37 C.F.R. § 1.71(a) states that the "specification must include a written description of the invention" (emphasis added). Accordingly, this application includes a written description of the invention.

Other rules provide suggestions for formatting or organization of patent applications. For instance, 37 C.F.R. § 1.77 indicates that, if a Brief Summary of the Invention (hereinafter "Summary") is provided, it "should precede the detailed description." This rule uses the permissive or suggestive verbal auxiliary "should," rather than the imperative "must." Furthermore, 37 C.F.R. § 1.73 clearly indicates that the Summary is an option, in that the rule includes the following text: "Such summary should, when set forth, be commensurate with the invention." (Emphasis added.) Thus, the rules clearly anticipate that a Summary need not always be "set forth" or included.

The Office Action refers to 37 C.F.R. § 1.73. However, Applicant respectfully maintains that the portions of 37 C.F.R. § 1.73 which use the verbal auxiliary "should" (rather than the imperative "must") merely specify a suggested or preferred format, not a legally required format.

Application No.: 09/512,395

Docket No.: 42390.P0744C2

Utility Patent Application

Claims

This preliminary amendment cancels all previously pending claims and enters new claims 42-60. Claims 42, 49, and 56 are the independent claims. Claim 42 recites a machine-readable storage medium with instructions which, when executed, implement an interpreter. The operations to be performed by the interpreter include "receiving a series of source code instructions expressed in a programming language, wherein at least one of the source code instructions comprises a command and an argument." The operations also include "in response to receiving a source code instruction having a command and an argument, building at least part of a stack-based execution stream," as well as "executing the stack-based execution stream."

Furthermore, claim 42 recites that the operation of building at least part of a stack-based execution stream comprises (a) "storing the instruction's argument on a stack," (b) "determining an address for an object code routine corresponding to the instruction's command," and (c) "storing the address for said object code routine on the stack."

The Office Action rejects previous claim 21 under 35 U.S.C. § 102(b) as anticipated by Richard Gabriel, Performance and Evaluation of Lisp Systems, MIT Press, August 1985 ("Gabriel"). In particular, the Office Action asserts that pages 35 and 36 of Gabriel disclose storing a routine address in a stack. To the extent that such a rejection might be applied to the new claims, Applicant respectfully traverses.

Page 35 of Gabriel states that "the caller [may push] arguments on the stack, ... where the callee expects them" (emphasis added). However, Gabriel does not disclose pushing the address of the callee onto the stack. For at least the foregoing reason, pages 35 and 36 of Gabriel do not disclose "storing the address for said object code routine on the stack," as recited by claim 42.

Independent claims 49 and 56 involve the same or similar features as those described above with regard to claim 42, and the dependent claims implicitly include the features of their respective parent claims. For at least the foregoing reasons, pages 35 and 36 of Gabriel do not anticipate any of the new claims.

Application No.: 09/512,395

Docket No.: 42390.P0744C2

Utility Patent Application

In addition, the dependent claims recite additional features. For instance, claim 43 depends from claim 42 and further specifies that the operation of executing the stack-based execution stream comprises "using the address of the object code routine from the stack to call said object code routine."

Similarly, claim 45, which depends from claim 42, discusses using the address of the object code routine from the stack to call said object code routine. In particular, claim 45 recites (i) that "an interpreter routine" is called from "a primary routine for interpretively executing source code instructions," and (ii) that "the interpreter routine uses the address of the object code routine from the stack to call said object code routine."

In addition, claim 45 specifies that the operation of receiving a series of source code instructions expressed in a programming language comprises repeatedly calling a parser routine from the primary routine. Claim 45 also specifies that the operation of building at least part of a stack-based execution stream comprises (i) pushing the instruction's argument onto the stack from the parser routine, and (ii) pushing the address for the object code routine corresponding to the instruction's command onto the stack "from the parser routine." Also, with regard to the operation of executing the stack-based execution stream, Claim 45 specifies (i) that the object code routine retrieves the argument from the stack and uses the argument, and (ii) that a result of the object code routine is stored on the stack.